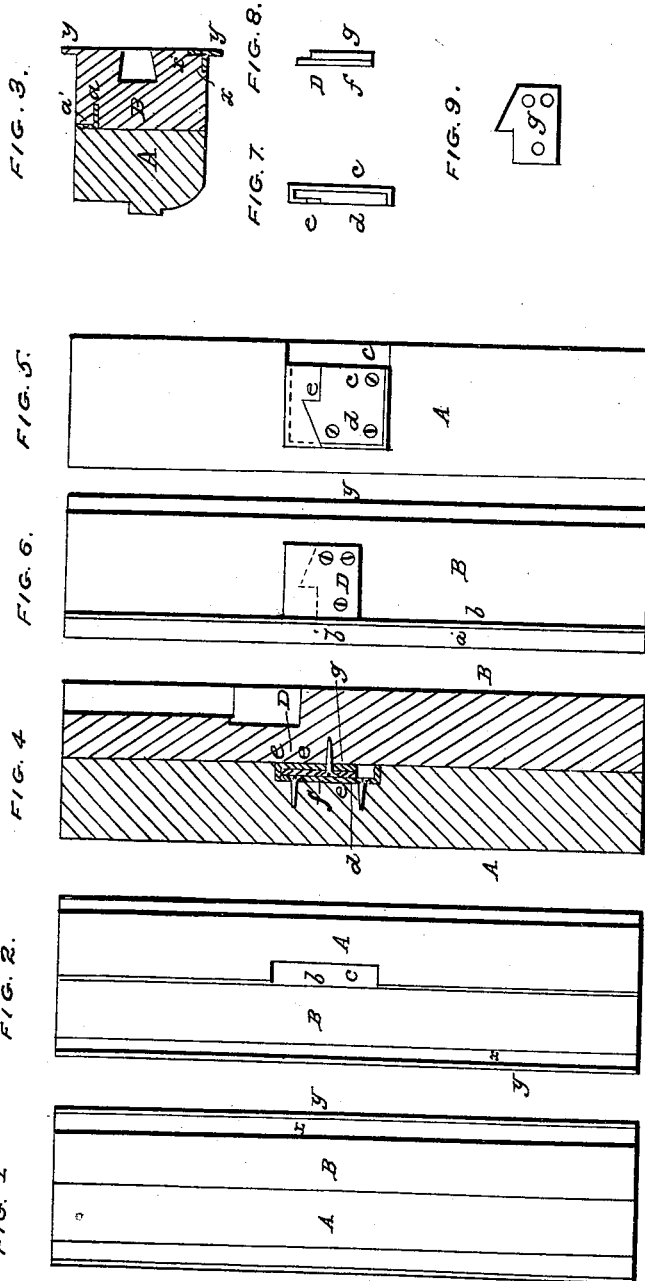


S. WALES.

Window.

No. 52,228.

Patented Jan'y 23, 1866.



WITNESSES:
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UNITED STATES PATENT OFFICE.

SIGOURNEY WALES, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN WINDOWS.

Specification forming part of Letters Patent No. 52,228, dated January 23, 1866.

To all whom it may concern:

Be it known that I, SIGOURNEY WALES, of Boston, in the county of Suffolk and State of Massachusetts, have made a new and useful invention having reference to Windows or the Sashes thereof; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings.

My said invention may be said to be an improvement on that secured to me in Letters Patent No. 48,749, dated July 11, 1865; and it relates to the application to each other of the sash and the removable connection piece or bar thereof, which in my patented invention was affixed to the sash by means of catches and spring-latches.

The purpose of my original invention was to enable a sash to be readily removed from its window-frame, in order that the panes of glass of such might be more easily washed or cleaned than when the sash might be in place in the frame. The invention dispensed with all necessity of removing from the window-frame, in order to separate a sash from it, either of the sash-holding bars or strips usually nailed or screwed to such frame and employed to aid in the formation of either of its sash-receiving grooves or channels.

My present invention or improvement avoids all appearance on the inner face of the sash of the connections of the sash and bar, and, furthermore, it provides against the passage of air or dust into and through the joint between the sash and the connection-bar.

Figure 1 of the drawings denotes a rear elevation of contiguous portions of the sash and its connection-bar. Fig. 2 is a front view of the same. Fig. 3 is a transverse section. Fig. 4 is a longitudinal section, and Figs. 5 and 6 are inner side views of the two. Figs. 7 and 8 are edge views of the two parts of the connection, to be hereinafter explained.

The nature of my present improvements consists in applying the connection-bar to the sash by means or mechanism which will require for the conjunction or disjunction of them two movements of the connection-bar—viz., a lateral and a longitudinal one; also, combining with the two a flexible elastic strip of vulcanized rubber, or its equivalent, so arranged as to cover or close the joint between the sash

and connection-piece when they are in conjunction.

In the drawings, A is one of the side bars of a sash, and B is the connection-bar, which, when in use, is suspended from one of the cords of the balancing-weights of the sash.

The bar B is grooved and recessed vertically on its inner edge, as represented at *a' a'* in Fig. 3, the same being for the reception and holding of a strip or flap, *b*, of india-rubber. The said strip is inserted and fixed in the groove *a*, and so as to project therefrom a distance equal to the width of the recess *a'*, which is arranged to receive the projecting part of the strip when bent at right angle with the portion inserted in the groove *a*. The depth of the recess *a'* is to be such as to cause the strip to press closely against the sash-bar A when the two parts A B are in conjunction. The bar B, for either sash, may also be grooved or recessed at one corner and on two of its sides, in manner as represented at *x x'*, and receive a weather strip or flap, *y*, of india-rubber, which may be nailed in one part, *x'*, of the recess and extend about the corner into the other part, *x*. This flap *y*, by bearing against the window-frame groove, will serve to prevent either dust or air from passing between it and the part B. The said sash-bar A is recessed to receive a metallic socket-piece, C, which is let into it and fastened in place by screws. The socket-piece consists of a plate of metal formed with a rectangular recess, *d*, which is open at one edge, and is provided with a notched lip, *e*, arranged and formed as represented in Figs. 5 and 7. This socket-piece C is intended to receive the metallic tenon D, which is fastened to the inner face of the bar B, and consists of two plates, *f g*, the latter being formed as shown in Fig. 9 and arranged directly against the bar B. The plate *f*, which is rectangular, is laid on the plate *g*, and both are fastened to the bar B by screws going through them and into the bar.

By inserting the tenon part D edgewise into the part C, and afterward raising the former upward in the latter, I shall be able to interlock the two. Consequently when I affix to each sash and its connection-bar two of such means of connecting or disconnecting them they may be readily fastened together or unfastened from each other, as occasion may re-

quire. The gravitating power of the sash-weights, while the sash may be in the act of being raised within the window-frame, will operate to maintain the sash in connection with its bar B, as the weights will cause the said bar to rise with the sash.

By slitting the strip *b* laterally at the top and bottom of the recess *c* a portion, *b'*, of the said strip, when the parts A B are in conjunction, will be caused to extend into the recess in such manner as to cover and protect the outer end and mouth of the socket-piece C.

I claim—

1. The application of the connection-bar B to the sash by means substantially as described—viz., the parts C D, whereby by a lateral and a longitudinal movement of one with respect to the other the two parts may be either connected or disconnected under circumstances

and in the manner and for the purpose as specified.

2. The arrangement and combination of the elastic or weather strip *b*, with the sash and its connection-piece B, substantially as described.

3. The combination of the flap or part *b'* with the rest of the weather-strip and sash, and to operate in the recess *c* and with respect to the socket-piece C in manner substantially as explained.

4. The construction of the window-sash or its part B with the recess or groove *x x'*, and with the weather-strip *y* applied thereto, and so as to operate in the window-frame substantially as described.

SIGOURNEY WALES.

Witnesses:

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